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IN THE

Supreme Court of the United States

SPEAKER OF THE ARIZONA HOUSE
OF REPRESENTATIVES AND
PRESIDENT OF THE ARIZONA SENATE,

Petitioners,

v.

MIRIAM FLORES, ET AL.,

Respondents.

**On Writ of Certiorari to
the United States Court of Appeals
for the Ninth Circuit**

BRIEF OF EDUCATIONAL POLICY AND FINANCE SCHOLARS AS AMICI CURIAE IN SUPPORT OF RESPONDENTS

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INTEREST OF AMICI CURIAE

Amici are twenty-three prominent scholars and researchers in education policy, finance, and economics.[1] They submit this brief to advise the Court that a brief filed by certain education-policy scholars in support of Petitioners—which argues that sound education policy focuses on measuring results, without regard to resource inputs—does not represent a consensus view. The Court should be aware both of methodological limitations in the studies cited by Petitioners' scholars and of contrary empirical research that goes unmentioned in their brief. More generally, amici submit this brief to stress that sustained educational achievement depends not only on clear goals and effective programs, but also on adequate resources.

The brief is joined by the following experts:

Jamal Abedi is a Professor at the School of Education at the University of California, Davis.

Bruce Baker is an Associate Professor at the Graduate School of Education at Rutgers University.

William Duncombe is a Professor of Public Administration at Syracuse University.

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[1] Each party has consented to the filing of this brief. Pursuant to Supreme Court Rule 37.6, no counsel for a party authored this brief in whole or in part, and no party or counsel for a party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than amici or their counsel made a monetary contribution to the preparation or submission of this brief.

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SUMMARY OF ARGUMENT

Petitioners' amici scholars assert that courts should not order states to increase educational funding and contend (p.5) that their position reflects "the consensus view of education-policy experts." The educational literature does not support their claim.

First, a growing body of empirical research confirms that adequate funding is integral to student achievement, and that funding increases—including increases ordered by courts—have led to substantial improvements in student performance. The federal No Child Left Behind Act ("NCLB") underscores the importance of adequate funding for education. In many states, meeting the new standards will require significant funding increases; attempting to meet the standards without funding increases may actually cause students harm.

Second, the research relied upon by Petitioners' scholars is either methodologically suspect or taken out of context. Most of the sources are authored or edited by Eric A. Hanushek, whose methodology and conclusions have been routinely criticized by both other scholars and the courts. The principal source relied upon is neither published nor public, yet Peti-

tioners' amici will not share the manuscript with the undersigned amici. Petitioners' amici also misplace reliance on the research of two additional authors, who have joined this brief in support of Respondents.

ARGUMENT

I. THE VIEWS OF PETITIONERS' SCHOLARS DO NOT REFLECT A "CONSENSUS," AND THE IMPORTANCE OF EDUCATIONAL FUNDING IS DEMONSTRATED BY A SUBSTANTIAL AND GROWING BODY OF RESEARCH.

Petitioners' scholars argue (p.7) that "[t]here is scant evidence that past judicial actions concerning school finance have had any beneficial effect on student performance." Although they do not purport to be familiar with the facts of this case, Petitioners' scholars predict (p.4) that the court-ordered funding in this case "is destined to fail."

The argument of Petitioners' scholars does not reflect "the consensus view," as they claim (p.5). In fact, the view of Petitioners' scholars is contradicted by a significant and growing body of empirical research. This research recognizes that, although funding alone will not guarantee students' success, inadequate funding ensures their failure.

A. Research Demonstrates That Adequate Funding Is Essential To Improving Student Performance.

Although we do not suggest that money alone will improve children's education, even the best designed and executed programs require sufficient resources. An overwhelming body of research illustrates that adequate funding is necessary to student achievement and that increasing funding improves student performance.

1. There is little dispute that programs and policies that improve student outcomes require adequate resources to execute. Even the most rigorous standards will not improve performance unless supported by the resources necessary to meet those standards. *See* Linda Darling-Hammond, *New Standards and Old Inequities: School Reform and the Education of African-American Students*, 69 J. Negro Educ. 263, 264 (2000) ("[S]tandards and tests alone will not improve schools or create educational opportunities where they do not now exist.").

Perhaps most importantly, more resources lead to better teachers, which in turn lead to better student performance. Economists have long documented that high-quality teachers are essential to student achievement. *See, e.g.*, Jonah E. Rockoff, *The Impact of Individual Teachers on Student Achievement: Evidence from Panel Data*, 94 Am. Econ. Rev. 247, 247–48 (2004); Daniel Aaronson et al., *Teachers and Student Achievement in the Chicago Public High Schools* 1–2 (Fed. Reserve Bank of Chi., Working Paper No. 2002-28, 2003), *available at*

http://www.chicagofed.org/publications/workingpress/papers/wp2002-28.pdf. Even Petitioners' scholars recognize that good teachers "matter importantly for student achievement." Steven G. Rivkin et al., *Teachers, Schools and Academic Achievement*, 73 Econometrica 417, 449 (2005).

An array of research demonstrates that increased funding leads to better teachers and better outcomes for students:

- There is a statistically significant link between teachers' salaries and students' future earnings. *See* David Card & Alan B. Krueger, *Does School Quality Matter? Returns to Education and the Characteristics of Public Schools in the United States*, 100 J. Pol. Econ. 1, 3 (1992).

- Higher salaries lead teachers to stay in the profession longer. *See* Donald Boyd et al., *The Preparation and Recruitment of Teachers: A Labor-Market Framework*, *in A Qualified Teacher In Every Classroom? Appraising Old Answers and New Ideas* 149, 158 (Frederick M. Hess et al. eds., 2004); Richard J. Murnane & Randall J. Olsen, *The Effects of Salaries and Opportunity Costs on Length of Stay in Teaching: Evidence from North Carolina*, 25 J. Hum. Resources 106, 106–07 (1990).

- Economists have concluded that "raising the wages of teachers by 50% will reduce high-school dropout rates by more than 15% and increase college enrollment rates by approximately 8%." Susanna Loeb & Marianne E. Page, *Examining*

the Link Between Teacher Wages and Student Outcomes: The Importance of Alternative Labor Market Opportunities and Non-Pecuniary Variation, 82 Rev. Econ. & Stat. 393, 393 (2000).

Higher salaries are especially critical to attracting teachers to poorer districts, given that most teachers "prefer higher-socioeconomic-status districts." Ronald F. Ferguson, *Paying for Public Education: New Evidence on How and Why Money Matters*, 28 Harv. J. on Legis. 465, 466 (1991). In this case, the Nogales district "cannot afford to pay market rate salaries" for qualified English Language Learner (ELL) teachers. Pet. App. 66a. As a result, the district must use long-term substitutes or instructors with "emergency" certification. Pet. App. 36a.

Other inputs also demonstrably improve student performance. For instance, smaller class sizes in elementary schools produce long-term improvements in student learning. *See, e.g.*, Jeremy D. Finn et al., *The Enduring Effects of Small Classes*, 103 Tchrs. C. Rec. 145, 174 (2001) (extensive controlled longitudinal study of over 6,300 students in 325 classes in 79 schools demonstrated that students in smaller classes had statistically significant differences in achievement and that differences endured over many years). But without adequate resources, smaller classes come at the expense of teacher quality.

Similarly, longer school days and school years improve student performance. *See, e.g.*, Maribeth Gettinger, *Time Allocated and Time Spent Relative to Time Needed for Learning as Determinants of Achievement*, 77 J. Educ. Psychol. 3, 4 (1985). Yet the

cost of extending the school day and school year is one of the primary reasons that more districts have not done so. *See* Janie E. Funkhouser et al., *A Research Review: The Educational Uses of Time*, 4 Stud. Educ. Reform (Pol'y Stud. Assocs., Inc., Washington, DC), 1995, at 7.

The education of ELL students requires even more resources than does the education of students who are proficient in English. *See, e.g.*, Jennifer Imazeki, *Assessing the Costs of K-12 Education in California's Public Schools*, 3 Educ. Fin. & Pol'y 90, 100 (2008) (74 percent more resources); William Duncombe & John Yinger, *How Much More Does a Disadvantaged Student Cost?*, 24 Econ. Educ. Rev. 513, 523 (2005) (101 to 142 percent more resources); John Augenblick & John Meyers, *Calculation of The Cost of An Adequate Education in Maryland in 1999-2000 Using Two Different Analytic Approaches* 17-18 (2001), *available at* http://www.schoolfunding.info-/states/md/MarylandAdequacyStudy.pdf (double the resources). Among other things, ELL students require additional teacher time and language aides. *See* Tom Parrish, *A Cost Analysis of Alternative Instructional Models for Limited English Proficient Students in California*, 19 J. Educ. Fin. 256, 263 (1994).

For example, in a recent study "panels of education experts . . . consistently indicate[d] that elementary and secondary level [ELL] children require additional personnel at rates of approximately 20 [ELL] children per full time teacher with 1 or more instructional aides per teacher." Bruce D. Baker et al., *Legal and Empirical Analysis of State Financing*

of Programs for Children with English Language Communication Barriers 12 (Spring 2004) (unpublished manuscript), *available at* http://web.ku.edu/-~bdbaker/index_files/page0002.htm. In this case, the Nogales superintendent considers additional tutors and teacher aides to be "essential," yet Nogales cannot afford them. J.A. 225.

2. Unsurprisingly, then, research demonstrates that increases in school funding improve student performance. *See, e.g.*, Jonathan Guryan, *Does Money Matter? Regression-Discontinuity Estimates from Education Finance Reform in Massachusetts* 21 (Nat'l Bureau of Econ. Research, Working Paper No. 826921, 2001), http://www.nber.org/papers/w8269 (increases in per-pupil spending led to significant increases in math, reading, science, and social studies test scores for 4th-grade students).[2]

For instance, a 2002 peer-reviewed study in the *Journal of Public Economics* measured the impact of court-ordered funding increases in twelve states during the 1980s. The study pooled samples of 100,000

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[2] *See also, e.g.*, John Deke, *A Study of the Impact of Public School Spending on Postsecondary Educational Attainment Using Statewide School District Financing in Kansas*, 22 Econ. Educ. Rev. 275, 276 (2003) (regression analysis demonstrates that spending increases significantly increased probability of students obtaining postsecondary education); G. Alfred Hess, Jr., *Understanding Achievement (And Other) Changes Under Chicago School Reform*, 21 Educ. Eval. & Pol'y Analysis 67, 78 (1999) (successful principals unanimous in their opinion that adequate funding made their improvement planning "meaningful," by allowing "resources to be put behind program decisions").

individual SAT scores drawn from the 48 contiguous states for each year from 1978 to 1992. Comparing the states under court orders with those that were not, the study concluded that court-ordered funding for underperforming districts had "an equalizing effect . . . on the test score outcomes for children from different family background groups" and "closed the gap in average SAT scores between children of highly-educated and poorly-educated parents by . . . roughly 5 percent." David Card & A. Abigail Payne, *School Finance Reform, The Distribution of School Spending, and the Distribution of Student Test Scores*, 83 J. Pub. Econ. 49, 67, 80 (2002).

A 2007 study highlighted similar gains following court-ordered funding increases in New Jersey. The study analyzed the state's official education assessments and the U.S. Department of Education's National Center for Education Statistics, which compared urban students, most of whom were covered by the court decree, and other categories of students in the state. This analysis demonstrated that funding increases ordered in 1998 for the urban students significantly improved their performance from 1999 to 2005. As a result of the court-ordered funding, "there was significant closure in the achievement gap between the [subject] districts and the rest of the state." Margaret E. Goertz & Michael Weiss, *Assessing Success in School Finance Litigation: The Case of New Jersey* (Nov. 12, 2007) (unpublished manuscript), *available at* http://devweb.tc.columbia.edu/manager/symposium/Files/111_goertz_NJ_case_study_draft%20_10.04.07_.pdf.

B. No Child Left Behind Underscores The Importance Of School Funding.

Although Petitioners' scholars acknowledge (p.17) that "States and localities may need more money to meet NCLB's standards," they argue that NCLB signals that courts should not "measure how much money States spend." Far from downplaying the importance of adequate inputs, however, NCLB underscores the importance of ensuring that states provide schools with adequate resources.

No Child Left Behind has not obviated the need to ensure that schools are adequately funded. The theory underlying NCLB was "greater funding *in exchange* for stricter accountability for results." Richard D. Kahlenberg, *Introduction* to *Improving on No Child Left Behind: Getting Education Reform Back on Track* 1, 5 (Richard Kahlenberg ed., 2008) (emphasis added). Experts recognize that states cannot meet NCLB standards without resources. *See, e.g.*, William J. Mathis, *The Cost of Implementing the Federal No Child Left Behind Act: Different Assumptions, Different Answers*, 80 Peabody J. Educ. 90, 105 (2005). Research, including research commissioned by states, underscores that meeting NCLB standards will require significant increases in funding. *See, e.g.*, Jennifer Imazeki & Andrew Reschovsky, *Does No Child Left Behind Place a Fiscal Burden on States? Evidence From Texas*, 1 Educ. & Fin. Pol'y 217, 238 (2006) (Texas must spend between $1.4 billion and $4 billion to meet standards imposed by NCLB); William Driscoll & Howard Fleeter, *Projected Costs of Implementing the Federal "No Child Left Behind Act" in Ohio* (Levin, Driscoll,

& Fleeter, Columbus, OH), 2003, at 60 (study prepared for the Ohio Department of Education estimates that NCLB will lead to additional annual costs of $1.4 billion).

When states try to meet NCLB standards without the necessary increases in funding, they create perverse incentives for schools and harm to students. Inadequate resources create incentives to refuse admittance to students with low test scores or special needs for fear of lowering the school's overall scores and stretching its resources further. *See, e.g.*, Julie Berry Cullen & Randall Reback, *Tinkering Towards Accolades: School Gaming Under a Performance Accountability System, in Improving School Accountability* 1, 2–3 (Timothy J. Gronberg & Dennis W. Jansen eds., 2006); Pub. Advocate of the City of New York & Advocates for Children, *Pushing Out At-Risk Students: An Analysis of High-School Discharge Figures* 6 (2002). The incentive to refuse admittance is particularly detrimental to non-English speaking students, who generally require more services. *See* Linda Darling-Hammond, *From "Separate But Equal" to "No Child Left Behind": The Collision of New Standards and Old Inequalities, in Many Children Left Behind* 3, 14 (Deborah Meier & George Wood eds., 2004); George Wood, *A View from the Field: NCLB's Effect on Classrooms and Schools*, *in Many Children Left Behind*, *supra*, at 33, 47.

Demanding outputs without sufficient inputs also encourages shortcuts and generally deflates teacher morale and student performance. Scholars observe that "[w]hen the expectations in an accountability system are so unreasonable, they undermine

morale, encourage cheating, and are generally not effective." William D. Duncombe et al., *Dollars Without Sense: The Mismatch Between No Child Left Behind Act Accountability and Title I Funding*, *in Improving on No Child Left Behind*, *supra*, at 19, 72–73.

On the other hand, Petitioners' scholars cite no evidence to support their supposition (p.10) that increased funding will encourage school districts to "keep ELL students languishing in the program and segregated from other students to ensure that funding for ELL programming does not diminish or disappear." If anything, it is inadequate funding that leaves students languishing. In the underfunded Nogales district, for instance, the average student needed four to five years to become proficient, over twice as long as contemplated by the Arizona legislature. Pet. App. 108a.

II. THE ARGUMENT OF PETITIONERS' SCHOLARS IS BASED ON RESEARCH THAT IS UNRELIABLE OR TAKEN OUT OF CONTEXT.

The brief of Petitioners' scholars is only as good as the scholarship on which it relies. Yet the scholarship on which their brief depends either suffers from serious methodological flaws or is taken out of context.

First, Petitioners' amici rely overwhelmingly on a single writer, Eric A. Hanushek, whose research has been called into question by both commentators and courts. Among other criticisms, Hanushek's scholar-

ship has been "widely challenged as being simplistic and misleading." Michael A. Rebell, *Poverty, "Meaningful" Educational Opportunity, and the Necessary Role of the Courts*, 85 N.C. L. Rev. 1467, 1480 (2007).

Second, Petitioners' amici rely heavily on a Hanushek-authored study that is not yet public—and which Petitioners' amici have refused to share with the undersigned amici.

Third, Petitioners' amici misplace reliance on the research by authors other than Hanushek. Indeed, two of the authors on which Petitioners' scholars rely have joined this amicus brief in support of Respondents.

A. Petitioners' Scholars Unduly Rely On The Flawed Work Of Eric Hanushek.

Of the eight secondary authorities cited by Petitioners' scholars, five have been edited or co-authored by Eric A. Hanushek, a signatory to the brief. Hanushek has long maintained: "*There is no systematic relationship between school expenditures and student performance*." Eric A. Hanushek, *When School Finance "Reform" May Not Be Good Policy*, 28 Harv. J. on Legis. 423, 425 (1991). But Hanushek's position contradicts the most rigorous empirical research.

1. Hanushek bases his conclusions on unreliable syntheses of prior studies. His results "depend crucially on the *peculiar way* in which he combines the many studies in the literature." Alan B. Krueger,

Understanding the Magnitude and Effect of Class Size on Student Achievement, *in The Class Size Debate* 7, 8 (Lawrence Mishel & Richard Rothstein eds., 2002) (emphasis added). His method of synthesis—which scholars describe as "vote counting"—is "known to be a rather insensitive procedure for summarizing results" and "is now rarely used in areas of empirical research where sophisticated syntheses of research are expected." Rob Greenwald et al., *The Effect of School Resources on Student Achievement*, 66 Rev. Educ. Res. 361, 362 (1996). The weakness of Hanushek's methodology is profound: as the number of studies to be synthesized increases, the "probability that a vote count will correctly detect an effect that is present in every study tends to zero." Larry V. Hedges et al., *Does Money Matter? A Meta-Analysis of Studies of the Effects of Differential School Inputs on Student Outcomes*, 23 Educ. Res. 5, 13 (1994).

After scrutinizing his work, other economists have concluded that Hanushek's data "support exactly the opposite conclusion." *Id.* at 5.

First, scholars from the University of Chicago have performed meta-analyses of the studies that Hanushek reviewed as well as of additional studies that Hanushek did not consider. After correcting the methodological errors that affected Hanushek's analysis, the authors found that "the data he assessed on the relations between school resource inputs and student outcomes, including achievement, were substantially more consistent and positive than [Hanushek] believed." Greenwald, *supra*, at 362. This rigorous review of Hanushek's data concluded

that "money is positively related to student achievement." *Id.* at 385.

Second, Princeton University economist Alan Krueger analyzed the literature reviews used by Hanushek to support his conclusion that increased resources, including smaller class sizes, do not improve student performance. According to Krueger, "Hanushek's pessimistic conclusion about the [effectiveness of increasing inputs] results in part from the fact that he inadvertently places disproportionate weight on studies that are based on smaller samples." Krueger, *supra*, at 8.[3] As a result, "Hanushek's selection criteria have the effect of biasing his representation of the literature toward finding zero or negative effect of class size on performance." *Id.* at 16. When this anomaly is corrected, and when "the various studies in Hanushek's sample are accorded equal weight, *class size is systematically related to student performance*." *Id.* at 9 (emphasis in original).

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[3] Specifically, Hanushek "uses a selection rule that would take more estimates from studies that analyzed subsamples of a larger dataset than from studies that used the full sample of a larger dataset." *Id.* at 8–9. For example, "if one study analyzed a pooled sample of third through sixth graders, it would generate a single estimate, whereas if another study using *the same data* analyzed separate subsamples of third graders, fourth graders, fifth graders, and sixth graders, that study would generate four estimates." *Id.* at 9 (emphasis in original). Moreover, "if the study further estimated separate regressions for math and reading scores for each subsample, as opposed to the average test score, it would yield 24 estimates." *Id.* Ultimately, "the lion's share of Hanushek's 277 estimates were extracted from a small minority of the 59 studies." *Id.*

The same flaws compromise Hanushek's research about the effect of resources more generally. "As with his class size studies, Hanushek [in his resources-based studies] extracted more estimates from studies that tended to find insignificant or negative effects of expenditures per student and fewer from studies that found positive effects." *Id.* at 21. If a proper methodology is employed, "*the opposite conclusion is more accurate*: unless one weighs the studies of school resources in peculiar ways, the *average study* tends to find that more resources are associated with greater student achievement." *Id.* (first emphasis added).

2. Courts too have identified serious flaws in Hanushek's work. For years, Hanushek has testified as a defense witness in school-funding lawsuits in state courts. *See, e.g.*, *Campaign for Fiscal Equal. v. State*, 801 N.E.2d 326, 334–35 (N.Y. 2003) (Hanushek's testimony "failed to rebut" the conclusion that "smaller class sizes in the earliest grades correlate with better test results during those years and afterwards."). Of the eleven cases in which he has testified, Hanushek has been on the losing side in nine of them. *See* Rebell, *supra*, at 1485 n.82.

Courts have identified serious limitations in Hanushek's research. In one case, the court observed that Hanushek reviewed student achievement in only a single year rather than over time; controlled insufficiently for "variables that could affect student scores[,] such as race, socio-economic status, and parental education"; and included in his calculations spending on ancillary items such as "maintenance, school lunch, and transportation." *Opinion of the*

Justices, 624 So. 2d 107, 140 (Ala. 1993). Even with these flaws, when Hanushek's data were reanalyzed "using actual rather than average test scores, [there was] *a statistically significant positive correlation* between expenditures and achievement." *Id.* at 140 n.34 (emphasis added).

When pressed, Hanushek himself acknowledges the importance of school funding. In one case, Hanushek "was billed as the expert who would demonstrate that 'money doesn't matter.'" *Montoy v. State*, No. 99-C-1738, 2003 WL 22902963, at *49. (Kan. Dist. Ct. Dec. 2, 2003). But Hanushek ultimately acknowledged that "money spent wisely, logically, and with accountability would be very useful indeed." *Id.* He further agreed: "Only a fool would say money doesn't matter." *Id.*

B. Petitioners' Scholars Improperly Rely on a Forthcoming, Unpublished Study, Which They Refuse to Share With The Undersigned Amici.

The work most frequently cited by Petitioners' scholars is Eric A. Hanushek & Alfred A. Lindseth, *Schoolhouses, Courthouses and Statehouses: Solving the Funding-Achievement Puzzle in America's Public Schools* (forthcoming May 2009). In this study, which Petitioners' scholars cite ten times, Hanushek and his coauthor purport (pp.7–8) to have "examined the performance of students in four States—Kentucky, Massachusetts, New Jersey, and Wyoming—that experienced extraordinary funding increases as a result of court-ordered remedies." They assert (p.8) that "relative to the rest of the Nation,

the results in three of the four States were 'largely disappointing.'"

This work is not publicly available. Petitioners' amici have not placed this unpublished work on file with the Clerk of this Court or with the Court's library. Yet counsel for Petitioners' amici informed the undersigned that Hanushek would not authorize the draft to be shared with Respondents' amici.

Without access to Hanushek's unpublished work, it is impossible for amici or the Court to evaluate Hanushek's empirical claims. What little we do know, however, suggests that this forthcoming analysis suffers from methodological flaws and in any event does not support its authors' conclusions. The unpublished study apparently focuses on statewide scores on the National Assessment of Educational Progress ("NAEP") over a period of fifteen years, from 1992–2007, the latest year for which NAEP scores are available. If the study does so, it faces the following methodological limitations:

- The major state court funding decisions in three of the four states (Massachusetts, New Jersey and Wyoming) were not issued and fully implemented until after 1992. *See State v. Campbell County Sch. Dist.*, 32 P.3d 325 (Wyo. 2001); *State v. Campbell County Sch. Dist.*, 19 P.3d 518 (Wyo. 2001); *Abbott v. Burke*, 710 A.2d 82 (N.J. 1998); *Campbell County Sch. Dist. v. State*, 907 P.2d 1238 (Wyo. 1995); *McDuffy v. Sec'y of the Exec. Office of Educ.*, 615 N.E.2d 516 (Mass. 1993).

- NAEP data for eighth-grade reading scores does not go back to 1992. *See* Nat'l Ctr. for Educ. Statistics, U.S. Dep't of Educ., *The Nation's Report Card: History of State Participation, 1990–1998*, http://nces.ed.gov/nationsreportcard/about/statehistorypublic.asp (last visited Mar. 24, 2009).

- Some states did not participate in the NAEP testing until they were required to do so by NCLB in 2003. *See id.*

- NAEP changed its rules regarding inclusion and accommodations in 1996, and readers are cautioned about making long-term trend comparisons before and after that date. *See* Nat'l Ctr. for Educ. Statistics, U.S. Dep't of Educ., *NAEP Inclusion Policy: Inclusion of Special-Needs Students*, http://nces.ed.gov/nationsreportcard/about/inclusion.asp (last visited Mar. 24, 2009).

- Not all students in New Jersey received funding under the New Jersey court decree. *See Abbott v. Burke*, 575 A.2d 359, 384–86 (N.J. 1990).

Even putting those limitations aside, Hanushek's conclusion is suspect. According to NAEP results for the four states in question during the years for which complete data is available, students in the four studied states exceeded the average national performance, and the average national rates of progress, in three-quarters of the categories measured. *See* Nat'l Ctr. for Educ. Statistics, U.S. Dep't of Educ., NCES 2007-496, *The Nation's Report Card: Reading 2007* 17 tbl. 6, 35 tbl. 11 (2007), *available at* http://nces.ed.gov/nationsreportcard/pdf/main2007/20

07496.pdf; Nat'l Ctr. for Educ. Statistics, U.S. Dep't of Educ., NCES 2007-494, *The Nation's Report Card: Mathematics 2007* 16 tbl. 6, 33 tbl. 11 (2007), *available at* http://nces.ed.gov/nationsreportcard/pdf-/main2007/2007494.pdf.

C. Petitioners' Scholars Incorrectly Claim Support From The Work of Baker And Markham, Both Of Whom Have Joined This Brief.

One of the few non-Hanushek sources cited by Petitioners' scholars is Bruce D. Baker & Paul L. Markham, *State School Funding Policies and Limited English Proficient Students*, 26 Bilingual Res. J. 659 (2002). In citing this work for the proposition that schools will not spend money efficiently or effectively, Petitioners' scholars take the authors' analysis out of context. These authors, Bruce D. Baker and Paul L. Markham, have joined this brief in support of Respondents.

Baker and Markham criticize as irrational not the use of education funding, but the method by which it is allocated: many states, including states with sizable non-English-speaking populations, were providing insufficient funding for districts to meet the programming costs and needs of ELL students. Petitioners' scholars quote (p.9) the article's statements that "state efforts to help local districts provide adequate programming opportunities for [ELL] are often poorly conceived or applied" and that "funding policies that are neither rational nor equitable" will not improve student performance. *Id.* at 678. According to Baker and Markham, certain funding

policies were irrational because they "fail[ed] to systematically allocate more aid for [ELL] children to districts where more [ELL] children reside" and others allocated more aid "to higher income districts with higher core expenditures per pupil that were less dependent on state aid in general." *Id.* at 674–75.

Thus, far from concluding that additional funding is unnecessary, Baker and Markham stress the opposite: If state aid to ELL students is provided "at levels insufficient to provide for services in full, those districts with the largest numbers of [ELL] pupils will have the greatest difficulty in finding *the resources to provide adequate opportunities*." *Id.* at 662–63 (emphasis added).

CONCLUSION

The judgment of the court of appeals should be affirmed.

Respectfully submitted,

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